401 KAR 51:017. Prevention of significant deterioration of air quality.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET Department of Environmental Protection Division of Air Quality

RELATES TO: KRS 224.10-100; 40 CFR 51 Subpart I, Appendix S, Section IV, Part 51, Appendix W, 51.166, 52.21, Part 58, Appendix B, 60, 61, 63, 81.318, 81 Subpart D; 42 USC 7401 to 7671q (Clean Air Act), 4321 to 4370d (National Environmental Policy Act)

STATUTORY AUTHORITY: KRS 224.10-100; 40 CFR 51.166, 52.21, 42 USC 7401 to 7671q (Clean Air Act)

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to prescribe regulations for the prevention, abatement and control of air pollution. This administrative regulation provides for the prevention of significant deterioration of ambient air quality. The provisions of this administrative regulation are not different nor more stringent than the federal regulation, 40 CFR 51.166.

Section 1. Definitions. Terms not defined in this section shall have the meaning given them in $401\ \text{KAR}\ 51:001$.

- (1) (a) "Actual emissions" means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with paragraphs (b) to (d) of this subsection.
- (b) Actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during the two (2) year period which precedes the particular date and is representative of normal source operation. The cabinet may allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
- (c) The cabinet may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
- (d) For an emissions unit (other than an electric utility steam generating unit) which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.
- (e) For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit following the physical or operational change, if the source owner or operator maintains and submits to the cabinet on an annual basis for a period of five (5) years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed ten (10) years, may be required by the cabinet if it determines that period to be more representative of normal source post-change operations.
- (2) "Adverse impact on visibility" means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Class I area. This determination shall be made on a case-by-case basis and shall consider the geographic extent, intensity, duration, frequency and time of visibility impairment, and how these factors correlate with the times of visitor use of the Class I area, and the frequency and timing of natural conditions that reduce visibility.
- (3) "Allowable emissions" means the emissions rate of a stationary source which is calculated using the maximum rated capacity of the source (unless the source is subject to state or federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:
- (a) The applicable standards in Title 401, KAR Chapters 57, 59, 60, and 63, or 40 CFR 60, 61, and 63;
- (b) The applicable state or federally approved regulatory emissions limitation, including those with a future compliance date; or
- (c) The emissions rate specified as a state or federally enforceable permit condition, including those with a future compliance date.
- (4)(a) "Baseline area" means an intrastate area (and every part of that area designated as attainment or unclassifiable pursuant to 42 USC

 $7404\,(d)\,(1)\,(A)\,(ii)$ or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act), in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than one (1) $\mu g/m^3$ (annual average) of the pollutant for which the minor source baseline date is established. Area redesignations under 42 USC 7404(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act), cannot intersect or be smaller than the area of impact of a major stationary source or major modification which:

- 1. Establishes a minor source baseline date; or
- 2. Is subject to this administrative regulation and would be constructed in the Commonwealth of Kentucky.
- (b) A baseline area established originally for total suspended particulate (TSP) increments shall remain in effect and shall apply in determining the amount of available PM_{10} increments, except that this baseline area shall not remain in effect if the cabinet rescinds the corresponding minor source baseline date in accordance with subsection (27)(b) of this section.
- (5) "Baseline concentration" means that ambient concentration level which exists in the baseline area when the applicable minor source baseline date is established. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:
- (a) The actual emissions representative of sources in existence on the applicable minor source baseline date, except as provided in paragraph (c) of this subsection; and
- (b) The allowable emissions of major stationary sources which commenced construction before the major source baseline date but were not in operation by the applicable minor source baseline date.
- (c) The following shall not be included in the baseline concentration and shall affect the maximum applicable allowable increase:
- 1. Actual emissions at a major source, which result from construction commencing after the major source baseline date; and
- 2. Actual emissions increases and decreases at a stationary source occurring after the minor source baseline date.
- (6)(a) "Baseline date" means major source baseline date, defined in subsection (24) of this section, or minor source baseline date, defined in subsection (27) of this section.
- (b) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:
- 1. The area in which the proposed source or modification would construct is designated as attainment or unclassifiable pursuant to $42~\mathrm{USC}$ 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act) for the pollutant on the date of its complete application; and
- 2. For a major stationary source, the pollutant would be emitted in significant amounts, or, for a major modification, there would be a significant net emissions increase of the pollutant.
- (7) "Begin actual construction" means initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Those activities include, but are not limited to, installation of building supports and foundations, laying underground pipework, and construction of permanent storage structures. For a change in method of operations, this term refers to those on-site activities other than the preparatory activities which mark the initiation of the change.
- (8) "Best available control technology" means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), which would be emitted from a proposed major stationary source or major modification which the cabinet, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for that source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of that pollutant. Application of best available control technology shall not result in emissions of a pollutant which would exceed the emissions allowed by an applicable standard under Title 401, KAR Chapters 57, 59, 60, and 63, or 40 CFR Parts 60, 61, and 63. If the Cabinet determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, or operational standard, or combination of

design, equipment, work practice, or operational standard, may be prescribed instead to satisfy the requirement for the application of best available control technology. That standard shall, to the degree possible, establish the emissions reduction achievable by implementation of the design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

- (9) "Building, structure, facility, or installation" means all of the pollutant emitting activities which belong to the same industrial grouping, are located on one (1) or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of a vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same major group (i.e., which have the same two (2) digit code) as described in the Standard Industrial Classification Manual, 1987, which has been incorporated by reference in Section 21 of this administrative regulation.
- (10) "Clean coal technology" means a technology, including technologies applied at the precombustion, combustion, or post-combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.
- (11) "Clean coal technology demonstration project" means a project using funds appropriated under the heading "Department of Energy Clean Coal Technology," up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or a similar project funded through appropriations for the U.S. EPA. The federal contribution for a qualifying project shall be at least twenty (20) percent of the total cost of the demonstration project.
- (12) "Commence," for construction of a major stationary source or major modification, means that the owner or operator has all necessary preconstruction approvals or permits and either has:
- (a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
- (b) Entered into agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.
- (13) "Complete" means, in reference to an application for a permit, that the application contains information necessary for processing the application. Designating an application complete for permit processing does not preclude the cabinet from requesting or accepting additional information.
- (14) "Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.
- (15) "Electric utility steam generating unit" means a steam electric generating unit that is constructed for the purpose of supplying more than one-third (1/3) of its potential electric output capacity and more than twenty-five (25) megawatt electrical output to a utility power distribution system for sale. Steam supplied to a steam distributing system for the purpose of providing steam to a steam-electric generator producing electric energy for sale is also considered in determining the electrical energy output capacity of the affected facility.
- (16) "Emissions unit" means a part of a stationary source which emits or would have the potential to emit a pollutant subject to regulation under $42~\mathrm{USC}$ 7401 to 7671q (Clean Air Act).
- (17) "Federal land manager" means, for lands in the United States, the secretary of the department with authority over those lands.
- (18) "Federally enforceable" means all limitations and conditions which are enforceable by the U.S. EPA, including those requirements developed pursuant to 40 CFR 60, 61, and 63, requirements within an applicable State Implementation Plan (SIP) and any permit requirements established pursuant to 40 CFR 52.21, or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an EPA-approved program incorporated into the SIP, which expressly requires adherence to a permit issued under the program.
- (19) "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

- (20) "High terrain" means an area having an elevation of 900 feet or more above the base of the stack of a source.
- (21) "Innovative control technology" means a system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or non-air quality environmental impacts.
 - (22) "Low terrain" means an area other than high terrain.
- (23) "Major modification" means a physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act).
- (a) A net emissions increase that is significant for volatile organic compounds shall be significant for ozone.
- (b) A physical change or change in the method of operation shall not include:
 - Routine maintenance, repair and replacement;
- 2. Use of alternative fuel or raw material by reason of an order or a natural gas curtailment plan in effect under a federal act;
- 3. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
- 4. Use of an alternative fuel or raw material by a stationary source which:
- a. The source was capable of accommodating before January 6, 1975, unless the change would be prohibited under a permit condition which was established after January 6, 1975; or
- b. The source $\bar{i}s$ approved to use under a permit issued under this administrative regulation or under 40 CFR 52.21;
- 5. An increase in the hours of operation or in the production rate, unless the change would be prohibited after January 6, 1975, pursuant to 40 CFR 52.21; after June 6, 1979, pursuant to 401 KAR 51:015; after September 22, 1982, pursuant to this administrative regulation; or under 401 KAR 50:035 and 401 KAR 51:016E; or
 - 6. A change in ownership at a stationary source.
- 7. The addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless the cabinet, concurring with U.S. EPA, determines that such addition, replacement, or use renders the unit less environmentally beneficial, unless:
- a. The Cabinet has reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of a criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of 42 USC 7401 to 7515 (Title I of the Clean Air Act), if any, and
- b. The cabinet determines that the increase will cause or contribute to a violation of any national ambient air quality standard or Prevention of Significant Deterioration (PSD) increment or visibility limitation.
- 8. The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, if the project complies with the Kentucky SIP and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
- 9. The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, if the project does not result in an increase in the potential to emit of a regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.
- 10. The reactivation of a very clean coal-fired electric utility steam generating unit.
 - (24) "Major source baseline date" means:
 - (a) For particulate matter and sulfur dioxide, January 6, 1975; and
 - (b) For nitrogen dioxide, February 8, 1988.
 - (25) (a) "Major stationary source" means:
- 1. Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of a pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act): fossil fuel-fired steam electric plants of more than 250 million BTU per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore

reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combination of fossil fuel boilers) totaling more than 250 million BTU per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;

- 2. Notwithstanding the stationary source size specified in subparagraph 1. of this paragraph, a stationary source which emits, or has the potential to emit, 250 tons per year or more of an air pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act); or
- 3. Any physical change that would occur at a stationary source not otherwise qualifying under this subsection as a major stationary source, if the change would constitute a major stationary source by itself.
- (b) A major stationary source that is major for volatile organic compounds shall be considered major for ozone.
- (c) For this administrative regulation, the fugitive emissions of a stationary source shall not be included in determining if it is a major stationary source, unless the source belongs to one (1) of the following categories of stationary sources:
 - 1. Coal cleaning plants (with thermal dryers);
 - Kraft pulp mills;
 - 3. Portland cement plants;
 - 4. Primary zinc smelters;
 - Iron and steel mills;
 - 6. Primary aluminum ore reduction plants;
 - 7. Primary copper smelters;
- 8. Municipal incinerators capable of charging more than 250 tons of refuse per day;
 - 9. Hydrofluoric, sulfuric, or nitric acid plants;
 - 10. Petroleum refineries;
 - 11. Lime plants;
 - 12. Phosphate rock processing plants;
 - 13. Coke oven batteries;
 - 14. Sulfur recovery plants;
 - 15. Carbon black plants (furnace process);
 - 16. Primary lead smelters;
 - 17. Fuel conversion plants;
 - 18. Sintering plants;
 - 19. Secondary metal production plants;
 - 20. Chemical process plants;
- 21. Fossil-fuel boilers (or combination of fossil-fuel boilers) totaling more than 250 million BTUs per hour heat input;
- 22. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
 - 23. Taconite ore processing plants;
 - 24. Glass fiber processing plants;
 - 25. Charcoal production plants;
- 26. Fossil fuel-fired steam electric plants of more than 250 million BTUs per hour heat input; and
- 27. Any stationary source category which, as of August 7, 1980, is being regulated under Title 401, KAR Chapters 57, 59, 60, and 63; 40 CFR Parts 60, 61, and 63; or 42 USC 7411 or 7412 (Section 111 or 112 of the Clean Air Act).

 (26) "Mandatory Class I federal area" means an area identified in 40 CFR
- (26) "Mandatory Class I federal area" means an area identified in 40 CFR 81, Subpart D, where the administrator of the U.S. EPA, in consultation with the Secretary of the United States Department of Interior, has determined visibility to be an important value.
- (27) \hat{a} "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the relevant regulations. The trigger date shall be:
 - 1. For particulate matter and sulfur dioxide, August 7, 1977, and
 - 2. For nitrogen dioxide, February 8, 1988.

- (b) A minor source baseline date established originally for the TSP increments shall remain in effect and shall apply in determining the amount of available PM_{10} increments, except that the cabinet may rescind the minor source baseline date if it can be shown, to the satisfaction of the cabinet, that the emissions increase from the major modification responsible for triggering that date did not result in a significant amount of PM_{10} emissions.
- (28) "Natural conditions" means those naturally occurring phenomena that reduce visibility as measured in terms of visual range, contrast, or coloration.
- (29) "Necessary preconstruction approvals or permits" means those permits or approvals required under the regulations of Title 401, KAR Chapters 50 to 65 and federal air quality control laws and regulations.
- (30)(a) "Net emissions increase" means the amount by which the sum of subparagraphs 1. and 2. of this paragraph exceeds zero:
- 1. An increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and
- 2. Other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.
- (b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if:
- 1. For construction that commences prior to January 6, 2002, it occurs between the date ten (10) years before construction on the particular change commences, and the date that the increase from the particular change occurs.
- 2. For construction that commences on and after January 6, 2002, it occurs between the date five (5) years before construction on the particular change commences, and the date that the increase from the particular change occurs.
- (c) An increase or decrease in actual emissions is creditable only if the cabinet or the U.S. EPA has not relied on it in issuing a permit for the source under this administrative regulation or 40 CFR 52.21, if the permit is in effect when the increase in actual emissions from the particular change occurs.
- (d) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides which occurs before the applicable minor source baseline date is creditable only if it is considered in calculating the amount of maximum allowable increases remaining available. For particulate matter, only PM_{10} emissions shall be used to evaluate the net emissions increase for $\mathrm{PM}_{10}.$
- (e) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
 - (f) A decrease in actual emissions is creditable only to the extent that:
- 1. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
- 2. It is state or federally enforceable from the time that actual construction on the particular change begins; and
- 3. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- (g) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. A replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
- (31) "Pollution control project" means an activity or project undertaken at an existing electric utility steam generating unit in order to reduce emissions from that unit. Such activities and projects are limited to:
- (a) The installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls and electrostatic precipitators;
- (b) An activity or project to accommodate switching to a fuel that is less polluting than the fuel used prior to the activity or project, including but not limited to natural gas or coal re-burning, or the co-firing of natural gas and other fuels for the purpose of controlling emissions;
- (c) A permanent clean coal technology demonstration project conducted under 42 USC 5903(d) (Title II, section 101(d), of the Further Continuing Appropriations Act of 1985) or subsequent appropriations, up to a total of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the U.S. Environmental Protection Agency, or

- (d) A permanent clean coal technology demonstration project that constitutes a repowering project.
- (32) "Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical or operational design. A physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is state or federally enforceable. Secondary emissions shall not count in determining the potential to emit of a stationary source.
- (33) "Reactivation of a very clean coal-fired electric utility steam generating unit" means a physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation if the unit:
- (a) Has not been in operation for the two (2) year period between November 15, 1988, and November 15, 1990, and the emissions from that unit continue to be carried in the Kentucky emissions inventory after November 15, 1990.
- (b) Was equipped prior to shutdown with a continuous system of emissions control achieving a removal efficiency for sulfur dioxide of no less than eighty-five (85) percent and a removal efficiency for particulates of no less than ninety-eight (98) percent;
- (c) Is equipped with ${\rm low\text{-}NO}_{\rm x}$ burners prior to the time of commencement of operations following reactivation; and
- (d) Is otherwise in compliance with the requirements of 42 USC 7401 to 7671g (Clean Air Act).
- (34)(a) "Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator of U.S. EPA in consultation with the Secretary of Energy, a derivative of one or more of these technologies, or another technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.
- (b) Repowering shall also include an oil or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991 by the Department of Energy.
- (c) The cabinet shall give expedited consideration to a permit application from a source that satisfies the requirements of this subsection and is granted an extension under 42 USC 7651h (Section 409 of the Clean Air Act).
- (35) "Representative actual annual emissions" means the average rate, in tons per year, at which the source is projected to emit a pollutant for the two (2) year period after a physical change or change in the method of operation of a unit (or a different consecutive two (2) year period within ten (10) years after that change, if the cabinet determines that this period is more representative of normal source operations), considering the effect the change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the cabinet shall:
- (a) Consider all the relevant information, including but not limited to, historical operational data, the company's own representations, filings with local, state, or federal regulatory authorities, and compliance plans under 42 USC 7651 to 76510 (Title IV of the Clean Air Act); and
- (b) Exclude, in calculating an increase in emissions that results from the particular physical change or change in method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.
- (36) "Secondary emissions" means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For this administrative regulation, secondary emissions shall be specific, well defined, quantifiable, and impact the same general area

as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from an offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions shall not include emissions which come from a mobile source, (e.g., the emissions from the tailpipe of a motor vehicle, from a train, or from a vessel).

- (37) "Significant" means:
- (a) In reference to a net emissions increase or the potential of a source to emit a pollutant listed in Section 22 of this administrative regulation, a rate of emissions that would equal or exceed a rate given in Section 22 of this administrative regulation.
- (b) In reference to a net emissions increase or the potential of a source to emit a pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), that is not listed in Section 22 of this administrative regulation, any emissions rate.
- (c) Notwithstanding paragraph (b) of this subsection and Section 22 of this administrative regulation, "significant" means an emissions rate or net emissions increase associated with a major stationary source or major modification which is to be constructed within ten (10) kilometers of a Class I area and has an impact on that area equal to or greater than one (1) $\mu g/m^3$ (twenty-four (24) hour average).
- (38) "Stationary source" means a building, structure, facility, or installation which emits or may emit an air pollutant subject to regulation under the 42 USC 7401 to 7671q (Clean Air Act).
- (39) "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of five (5) years or less, and which complies with the Kentucky SIP and with other requirements necessary to attain and maintain the national ambient air quality standards during and after the project is terminated.
- (40) "Visibility impairment" means a humanly perceptible change in visibility (visual range, contrast, coloration) from that which would have existed under natural conditions.

Section 2. Applicability. This administrative regulation shall apply to a major stationary source or a major modification which:

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to $42~\mathrm{USC}~7407(d)$ (1) (A) (ii) or (iii) (Section 107(d) (1) (A) (iii) or (iiii) of the Clean Air Act). Area designations are contained in $40~\mathrm{CFR}~81.318$.
- Section 3. Ambient Air Increments. In areas designated as Class I or II, increases in pollutant concentration over the baseline concentration shall be limited to the levels specified in Section 23 of this administrative regulation. For a period other than an annual period, the applicable maximum allowable increase may be exceeded during one (1) such period per year at any one (1) location.
- **Section 4. Ambient Air Ceilings.** No concentration of a pollutant specified in Section 2 of this administrative regulation shall exceed:
- (1) The concentration permitted under the national secondary ambient air quality standard; or
- (2) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lower for the pollutant for a period of exposure.

Section 5. Area Classifications. (1) The following areas which were in existence on August 7, 1977, shall be Class I areas and shall not be redesignated:

- (a) International parks;
- (b) National wilderness areas and national memorial parks which exceed 5,000 acres in size; and
 - (c) National parks which exceed 6,000 acres in size.

- (2) Any other area, unless otherwise specified in the legislation creating the area, is designated Class II but may be redesignated as provided in 40 CFR 51.166(q).
- (3) The visibility protection requirements of this administrative regulation shall apply only to sources which may impact a mandatory Class I federal area.
 - (4) The following areas may be redesignated only as Class I or II:
- (a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and
- (b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.
- Section 6. Exclusions from Increment Consumption. (1) The cabinet may, after notice and opportunity for at least one (1) public hearing to be held in accordance with procedures established in 401 KAR 50:035, exclude the following concentrations in determining compliance with a maximum allowable increase:
- (a) Concentrations attributable to the increase in emissions from stationary sources which have been converted from the use of petroleum products, natural gas, or both by reason of an order in effect under a federal statute or regulation over the emissions from the sources before the effective date of the order;
- (b) Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the federal statute over the emissions from those sources before the effective date of the plan;
- (c) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified sources; and
- (d) Concentrations attributable to the temporary increase in emissions of sulfur dioxide, particulate matter, or nitrogen oxides from stationary sources which are affected by SIP revisions approved by the Administrator of the U.S. EPA as meeting the criteria specified in subsection (4) of this section.
- (2) Exclusion of concentrations shall not apply more than five (5) years after the effective date of the order to which subsection (1)(a) of this section refers or the plan to which subsection (1)(b) of this section refers, whichever is applicable. If both an order and plan are applicable, no exclusion shall apply more than five (5) years after the later of the two (2) effective dates.
- (3) For excluding concentrations pursuant to subsection (1)(d) of this section, the SIP revision shall specify the following provisions:
- (a) The time over which the temporary emissions increase of sulfur dioxide, particulate matter, or nitrogen oxides would occur. The time period shall not exceed two (2) years in duration unless a longer time is approved by the U.S. EPA;
- (b) The time period for excluding certain contributions in accordance with paragraph (a) of this subsection is not renewable;
- (c) No emissions increase will occur from a stationary source which would:
- 1. Impact a Class I area or an area where an applicable increment is known to be violated; or
- 2. Cause or contribute to the violation of a national ambient air quality standard; and
- (d) Limitations shall be in effect at the end of the time period established in paragraph (a) of this subsection which ensure that the emissions levels from stationary sources affected by the SIP revision will not exceed those levels occurring from those sources before the revision was approved.
- **Section 7. Stack Heights.** (1) The degree of emission limitation required for control of an air pollutant under this administrative regulation shall not be affected by:
- (a) So much of the stack height of a source as exceeds good engineering practice; or
 - (b) Another dispersion technique.
- (2) Subsection (1) of this section shall not apply to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

- Section 8. Review of Major Stationary Sources and Major Modifications; Source Applicability and Exemptions. (1) A major stationary source or major modifications to which Sections 9 to 17 of this administrative regulation apply shall not begin actual construction until it obtains a permit stating that the stationary source or modification shall comply with Sections 9 to 17 of this administrative regulation.
- (2) Sections 9 to 17 of this administrative regulation shall apply to a major stationary source and major modification for each pollutant that it would emit which is subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), except as required in Section 2 of this administrative regulation.
- (3) Sections 9 to 17 of this administrative regulation shall apply only to a major stationary source or major modification that will be constructed in an area designated as attainment or unclassifiable pursuant to $42~\mathrm{USC}$ 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act).
- (4) Sections 9 to 17 of this administrative regulation shall not apply to a particular major stationary source or major modification if:
 - (a) The owner or operator:
- 1. Obtained the necessary federal, state, and local preconstruction approvals effective before September 22, 1982;
 - 2. Commenced construction before September 22, 1982; and
- 3. Did not discontinue construction for a period of eighteen (18) months or more; or
- (b) The source or modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at the institution, and the Governor of the Commonwealth of Kentucky requests that it be exempt from those requirements;
- (c) The source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:
 - Coal cleaning plants (with thermal dryers);
 - 2. Kraft pulp mills;
 - Portland cement plants;
 - 4. Primary zinc smelters;
 - 5. Iron and steel mills;
 - 6. Primary aluminum ore reduction plants;
 - 7. Primary copper smelters;
- 8. Municipal incinerators capable of charging more than 250 tons of refuse per day;
 - 9. Hydrofluoric, sulfuric, or nitric acid plants;
 - 10. Petroleum refineries;
 - 11. Lime plants;
 - 12. Phosphate rock processing plants;
 - 13. Coke oven batteries;
 - 14. Sulfur recovery plants;
 - 15. Carbon black plants (furnace process);
 - 16. Primary lead smelters;
 - 17. Fuel conversion plants;
 - 18. Sintering plants;
 - 19. Secondary metal production plants;
 - 20. Chemical process plants;
- 21. Fossil-fuel boilers (or combination of fossil-fuel boilers) totaling more than 250 million BTUs per hour heat input;
- 22. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
 - 23. Taconite ore processing plants;
 - 24. Glass fiber processing plants;
 - 25. Charcoal production plants;
- $26. \hspace{0.1in}$ Fossil fuel-fired steam electric plants of more than 250 million BTUs per hour heat input; or
- $27.\,$ Another stationary source category which, as of August 7, 1980, is being regulated under 42 USC 7411 or 7412 (Section 111 or 112 of the Clean Air Act); or
- (d) The source or modification is a portable stationary source which has previously received a permit under this administrative regulation; and:

- 1. The owner or operator proposes to relocate the source and emissions of the source at the new location would be temporary;
- 2. The emissions from the source would not exceed its allowable emissions;
- 3. The emissions from the source would not impact a Class I area or an area where an applicable increment is known to be violated; and
- 4. Reasonable notice is given to the cabinet prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Notice shall be given to the cabinet not less than ten (10) days in advance of the proposed relocation unless a different time duration is previously approved by the cabinet.
- (e) The source or modification was not subject to this administrative regulation with respect to particulate matter requirements in effect before July 31, 1987, and the owner or operator:
- 1. Obtained all final federal, state, and local preconstruction approvals or permits necessary under the applicable SIP before July 31, 1987;
- 2. Commenced construction within eighteen (18) months after July 31, 1987; and
- 3. Did not discontinue construction for a period of eighteen (18) months or more and completed construction within a reasonable period of time.
- (f) The source or modification was subject to this administrative regulation with respect to particulate matter requirements, as in effect before July 31, 1987, and the owner or operator submitted an application for a permit under this administrative regulation before that date, and the cabinet subsequently determined that the application as submitted was complete with respect to the particulate matter requirements then in effect in this administrative regulation. If not, the requirements of Sections 9 to 17 of this administrative regulation that were in effect before July 31, 1987, shall apply to the source or modification.
- (5) Sections 9 to 17 of this administrative regulation shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, for that pollutant, the source or modification is located in an area designated as non-attainment pursuant to 42 USC 7407(d)(1)(A)(i) (Section 107(d)(1)(A)(i) of the Clean Air Act).
- (6) Sections 10, 12 and 14 of this administrative regulation shall not apply to a major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from the modifications:
- (a) Will not impact a Class I area or an area where an applicable increment is known to be violated; and
 - (b) Will be temporary.
- (7) Sections 10, 12 and 14 of this administrative regulation as they apply to a maximum allowable increase for a Class II area shall not apply to a major modification at a stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), from the modification after the application of best available control technology will be less than fifty (50) tons per year.
- (8) The cabinet may exempt a stationary source or modification from the monitoring requirements of Section 12 of this administrative regulation for a particular pollutant if:
- (a) The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from the modification will cause air quality impacts in an area which are less than the amounts given in Section 24 of this administrative regulation; or
- (b) The concentrations of the pollutant in the area that the source or modification would affect are less than the concentrations listed in Section 24 of this administrative regulation, or the pollutant is not listed in Section 24 of this administrative regulation.
- (9)(a) At the discretion of the cabinet, the requirements for air quality monitoring of PM_{10} in Section 12 of this administrative regulation may not apply to a particular source or modification if the owner or operator of the source or modification submitted an application for a permit under this section on or before June 1, 1988, and the cabinet subsequently determines that the application as submitted before that date was complete, except for the

requirements for monitoring particulate matter specified in Section 12 of this administrative regulation.

- (b) The requirements for air quality monitoring of PM_{10} in Section 12 of this administrative regulation shall apply to a particular source or modification if the owner or operator of the source or modification submitted an application for a permit under 40 CFR 52.21 or this administrative regulation after June 1, 1988, and no later than December 1, 1988. The data shall have been gathered over at least the period from February 1, 1988, to the date the application becomes complete in accordance with Section 12 of this administrative regulation, unless the cabinet determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four (4) months), the data that Section 12 of this administrative regulation requires shall have been gathered over that shorter period.
- (10) The requirements of Section 10(2) of this administrative regulation shall not apply to a stationary source or modification with respect to any maximum allowable increase for PM_{10} if the owner or operator of the source or modification submitted an application for a permit under 40 CFR 52.21 or this administrative regulation before the date the provisions embodying the maximum allowable increases for PM_{10} took effect, and the cabinet subsequently determined that the application as submitted before that date was complete. Instead, the requirements of Section 10(2) shall apply for the maximum allowable increases for TSP as in effect on the day the application was submitted.
- (11) The requirements of Section 10(2) of this administrative regulation shall not apply to a stationary source or modification with respect to a maximum allowable increase for nitrogen oxides if the owner or operator of the source or modification submitted an application for a permit under 40 CFR 52.21 or this administrative regulation before the date on which the provisions embodying the maximum allowable increase took effect, and the cabinet subsequently determined that the application as submitted before that date was complete.
- **Section 9. Control Technology Review.** (1) A major stationary source or major modification shall meet each applicable emissions limitation under Title 401, KAR Chapters 50 to 65, and each applicable emission standard and standard of performance under 40 CFR 60, 61, and 63.
- (2) A new major stationary source shall apply best available control technology for each pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), that it will have the potential to emit in significant amounts.
- (3) A major modification shall apply best available control technology for each pollutant subject to regulation under 42 USC 7401 to 7671q (Clean Air Act), for which it will result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant will occur as a result of a physical change or change in the method of operation of the unit.
- (4) For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than eighteen (18) months prior to commencement of construction of each independent phase of the project. The owner or operator of the applicable stationary source may then be required to demonstrate the adequacy of a previous determination of best available control technology for the source.
- **Section 10. Source Impact Analysis.** The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), will not cause or contribute to air pollution in violation of:
- (1) A national ambient air quality standard in an air quality control region; or
- (2) An applicable maximum allowable increase over the baseline concentration in an area.
- Section 11. Air Quality Models. (1) Estimates of ambient concentrations shall be based on the applicable air quality models, data bases, and other requirements specified in 40 CFR Part 51, Appendix W ("Guideline on Air Quality Models (Revised)" (1986), Supplement A (1987), Supplement B (1993), and Supplement C (1996)), incorporated by reference in Section 21 of this administrative regulation.

(2) If an air quality model specified in 40 CFR Part 51, Appendix W, is inappropriate, the model may be modified or another model substituted. This change shall be subject to notice and opportunity for public comment under Section 16 of this administrative regulation. Written approval of the U.S. EPA shall be obtained for a modification or substitution. Methods similar to those outlined in the "Workbook for the Comparison of Air Quality Models," specified in 401 KAR 50:040, Section 1(3), shall be used to determine the comparability of air quality models.

Section 12. Air Quality Analysis. (1) Preapplication analysis.

- (a) An application for a permit under this administrative regulation shall contain an analysis of ambient air quality in the area that the major stationary source or major modification will affect for each of the following pollutants:
- 1. For a source, each pollutant that it will have the potential to emit in a significant amount as defined in Section 1(37) of this administrative regulation;
- 2. For a modification, each pollutant for which it will result in a significant net emissions increase.
- (b) With respect to a pollutant for which no national ambient air quality standard exists, the analysis shall contain the air quality monitoring data the cabinet determines necessary to assess ambient air quality for that pollutant in an area that the emissions of that pollutant will affect.
- (c) For pollutants (other than nonmethane hydrocarbons) for which a standard does exist, the analysis shall contain continuous air quality monitoring data gathered to determine if emissions of that pollutant will cause or contribute to a violation of the standard or a maximum allowable increase.
- (d) The required continuous air quality monitoring data shall have been gathered over a period of at least one (1) year and shall represent at least the year preceding receipt of the application, except that, if the cabinet determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one (1) year, but not less than four (4) months (e.g. with data obtained during a time period when maximum air quality levels can be expected), the required data shall have been gathered over at least that shorter period.
- (e) The owner or operator of a proposed stationary source or modification of volatile organic compounds who satisfies all conditions of 40 CFR Part 51, Appendix S, section IV, may provide post-approval monitoring data for ozone in lieu of providing preconstruction data required under paragraphs (a) to (d) of this subsection.
- (f) For an application that is complete, except for the requirements of paragraphs (c) and (d) of this subsection pertaining to PM_{10} , after December 1, 1988, and no later than August 1, 1989, the data that paragraph (c) of this subsection requires shall have been gathered over at least the period from August 1, 1988, to the date the application becomes otherwise complete, unless the cabinet determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four (4) months), the data that paragraph (c) of this subsection requires shall have been gathered over that shorter period.
- (g) For air quality monitoring of PM_{10} under Section 8(9)(a) and (b) of this administrative regulation, the owner or operator of the source or modification shall use a monitoring method approved by the cabinet and shall estimate the ambient concentrations of PM_{10} using the data collected by that approved monitoring method in accordance with estimating procedures approved by the cabinet.
- (2) Post-construction monitoring. The owner or operator of a major stationary source or major modification, after construction of the stationary source or modification, shall conduct the ambient monitoring which the cabinet determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in an area.
- (3) Operation of monitoring stations. The owner or operator of a major stationary source or major modification shall meet the requirements of 40 CFR Part 58, Appendix B, which is incorporated by reference in Section 21 of this administrative regulation, during the operation of monitoring stations to satisfy subsections (1) and (2) of this section.

Section 13. Source Information. The owner or operator of a proposed source or modification shall submit all information necessary to perform an analysis or make a determination required under this administrative regulation.

- (1) For a major source or major modification to which Sections 9, 11, 13 and 15 of this administrative regulation apply, the information shall include:
- (a) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;
 - (b) A detailed schedule for construction of the source or modification;
- (c) A detailed description of the system of continuous emission reduction planned for the source or modification, emission estimates, and other information necessary to determine that best available control technology will be applied.
- (2) Upon request of the cabinet, the owner or operator shall also provide information on:
- (a) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate the impact; and
- (b) The air quality impacts and the nature and extent of general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification will affect.

Section 14. Additional Impact Analysis. (1) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator is not required to provide an analysis of the impact on vegetation having no significant commercial or recreational value.

- (2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.
- (3) Visibility monitoring. The cabinet may require monitoring of visibility in a Class I area impacted by the proposed new stationary source or major modification using human observations, teleradiometers, photographic cameras, nephelometers, fine particulate monitors, or other appropriate methods as specified by the U.S. EPA. The method selected shall be determined on a case-by-case basis by the cabinet. Visibility monitoring required by the cabinet in a Class I area shall be approved by the federal land manager. Data obtained from visibility monitoring shall be made available to the cabinet, U.S. EPA, and the federal land manager, upon request.

Section 15. Sources Impacting Class I Areas; Additional Requirements. (1) Notice to U.S. EPA and federal land managers. The cabinet shall provide written notice to the U.S. EPA, the federal land manager, and the federal official charged with direct responsibility for management of lands within a Class I area of a permit application for a proposed major stationary source or major modification the emissions from which may affect the Class I area. The cabinet shall provide notice promptly after receiving the application.

The notice shall include a copy of all information relevant to the permit application and shall be given within thirty (30) days of receipt, and at least sixty (60) days prior to the public hearing on the application for a permit to construct. The notice shall include an analysis of the proposed source's anticipated impacts on visibility in the Class I area. The cabinet shall also provide the federal land manager and other federal officials with a copy of the preliminary determination required under Section 16 of this administrative regulation, and shall make available to them the materials used in making that determination, promptly after the cabinet makes it. The cabinet shall also notify all affected federal land managers within thirty (30) days of receipt of an advance notification of the permit application.

- (2) Federal land manager. The federal land manager and the federal official charged with direct responsibility for management of lands located in a Class I area have an affirmative responsibility to protect the air quality related values (including visibility) of the lands, and to consider, in consultation with the cabinet, whether a proposed source or modification will have an adverse impact on those values.
- (3) Visibility analysis. The cabinet shall consider an analysis performed by the federal land manager, provided within thirty (30) days of the notice and analysis required by subsection (1) of this section, that shows that a proposed new major stationary source or major modification may have an adverse

impact on visibility in a Class I area. If the cabinet finds that an analysis does not demonstrate to the satisfaction of the cabinet that an adverse impact on visibility will result in the Class I area, the cabinet shall, in the public notice required in 401 KAR 50:035, either explain that decision or give notice as to where the explanation can be obtained.

- (4) Denial; impact on air quality related values. The federal land manager of lands located in a Class I area may demonstrate to the cabinet that the emissions from a proposed source or modification will have an adverse impact on the air quality related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from the proposed source or modification will not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area as defined in Section 23 of this administrative regulation. If the cabinet concurs with the demonstration then the cabinet shall not issue the permit.
- (5) Class I variances. The owner or operator of a proposed source or modification may demonstrate to the federal land manager that the emissions from the source or modification will have no adverse impact on the air quality related values of lands located in a Class I area (including visibility), notwithstanding that the change in air quality resulting from emissions from the source or modification will cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the federal land manager concurs with the demonstration and he so certifies, the cabinet may, if the other applicable requirements of this administrative regulation are met, issue the permit with the emission limitations that are necessary to assure that emissions of sulfur dioxide, particulate matter, and nitrogen oxides will not exceed the maximum allowable increases over minor source baseline concentration for the pollutants specified in Section 25 of this administrative regulation.
- (6) Sulfur dioxide variance by governor with federal land manager's concurrence. The owner or operator of a proposed source or modification which cannot be approved under subsection (5) of this section because the source cannot be constructed without exceeding a maximum allowable increase in sulfur dioxide applicable to a Class I area for a period of twenty-four (24) hours or less, may demonstrate to the Governor of the Commonwealth of Kentucky that a variance under this clause will not adversely affect the air quality related values of the area (including visibility). The governor, after consideration of the federal land manager's recommendation (if applicable) and subject to his concurrence, may, after notice and public hearing, grant a variance from the maximum allowable increase. If a variance is granted, the cabinet shall issue a permit to the source or modification under the requirements of subsection (8) of this section, if the other applicable requirements of this administrative regulation are met.
- (7) Variance by the governor with the President's concurrence. If the Governor of the Commonwealth of Kentucky recommends a variance in which the federal land manager does not concur, the recommendations of the governor and the federal land manager shall be transmitted to the President of the United States of America. If the variance is approved by the President, the cabinet shall issue a permit pursuant to the requirements of subsection (8) of this section, if the other applicable requirements of this administrative regulation are met.
- (8) Emission limitations for presidential or gubernatorial variance. For a permit issued pursuant to subsections (6) or (7) of this section the source or modification shall comply with those emission limitations necessary to assure that emissions of sulfur dioxide from the source or modification will not (during a day on which the other applicable maximum allowable increases are exceeded) cause or contribute to concentrations which will exceed the maximum allowable increases over the baseline concentration as specified in Section 26 of this administrative regulation and to assure that the emissions will not cause or contribute to concentrations which exceed the other applicable maximum allowable increases for periods of exposure of twenty-four (24) hours or less for more than a total of eighteen (18) days, not necessarily consecutive, during an annual period.

Section 16. Public Participation. The cabinet shall follow the applicable procedures of 401 KAR 50:035 and 40 CFR 51.166(q) in processing applications under this administrative regulation.

Section 17. Source Obligation. (1) An owner or operator who constructs or operates a source or modification not in accordance with the application submitted to the cabinet under this administrative regulation or under the terms

of an approval to construct; or an owner or operator of a source or modification subject to this administrative regulation who begins actual construction after September 22, 1982, without applying for and receiving approval, shall be subject to appropriate enforcement action.

- (2) Approval to construct shall become invalid if construction is not commenced within eighteen (18) months after receipt of the approval, if construction is discontinued for a period of eighteen (18) months or more, or if construction is not completed within a reasonable time. The cabinet may extend the eighteen (18) month period upon a satisfactory showing that an extension is justified. This provision shall not apply to the time period between construction of the approved phases of a phased construction project; each phase shall commence construction within eighteen (18) months of the projected and approved commencement date.
- (3) Approval to construct shall not relieve an owner or operator of the responsibility to comply fully with Title 401, KAR Chapters 50 to 63, and other requirements of local, state, or federal law.
- (4) When a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in an enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, such as a restriction on hours of operation, then Sections 9 to 18 of this administrative regulation shall apply to the source or modification as though construction had not yet commenced on the source or modification.

Section 18. Environmental Impact Statements. If a proposed source or modification is subject to action by a federal agency which might necessitate preparation of an environmental impact statement pursuant to 42 USC 4321 to 4370d (the National Environmental Policy Act), review by the cabinet conducted pursuant to this administrative regulation shall be coordinated with the broad environmental reviews under that Act and under 42 USC 7609 (Section 309 of the Clean Air Act), to the maximum extent feasible and reasonable.

Section 19. Innovative Control Technology. (1) An owner or operator of a proposed major stationary source or major modification may request the cabinet in writing to approve a system of innovative control technology.

- (2) The cabinet shall, with the consent of the governors of other affected states, determine that the source or modification may employ a system of innovative control technology if:
- (a) The proposed control system will not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;
- (b) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under Section 9(2) of this administrative regulation by a date specified by the cabinet. The date shall not be later than four (4) years from the time of startup or seven (7) years from permit issuance;
- (c) The source or modification will meet Sections 9 and 10 of this administrative regulation based on the emissions rate that the stationary source employing the system of innovative control technology will be required to meet on the date specified by the cabinet;
- (d) The source or modification will not before the date specified by the cabinet:
- 1. Cause or contribute to a violation of an applicable national ambient air quality standard; or
 - 2. Impact an area where an applicable increment is known to be violated;
- (e) Section 15 of this administrative regulation (relating to Class I areas) has been satisfied for all periods during the life of the source or modification; and
- (f) All other applicable requirements including those for public participation have been met.
- (3) The cabinet shall withdraw approval to employ a system of innovative control technology if:
- (a) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate;
- (b) The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or

- (c) The cabinet decides that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.
- (4) If a source or modification fails to meet the required level of continuous emission reduction within the specified time period or the approval is withdrawn in accordance with subsection (3) of this section, the cabinet may allow the source or modification up to an additional three (3) years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.
- Section 20. Permit Condition Rescission. (1)(a) An owner or operator holding a permit for a stationary source or modification which contains conditions pursuant to 401 KAR 51:015 or 401 KAR 51:016E may request that the cabinet rescind the applicable conditions.
- (b) An owner or operator of a stationary source or modification who holds a permit for the source or modification which was issued under this administrative regulation as in effect on July 30, 1987, or an earlier version of this administrative regulation, may request that the cabinet rescind the permit or a particular portion of the permit.
- (2) The cabinet shall rescind a permit condition if requested and if the applicant can demonstrate to the satisfaction of the cabinet that this administrative regulation does not apply to the source or modification or to a portion of the source or modification.
- Section 21. Reference Material. (1) Incorporation by reference. The following documents are incorporated by reference:
- (a)1. Standard Industrial Classification Manual 1987, published by the Office of Management and Budget.
- 2. The manual is available under Order No. PB 87-100012 from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia, 22161; Phone (703) 487-4650.
 - (b) 1. Documents from the Code of Federal Regulations,
- a. 40 CFR Part 51, Appendix W: Guideline on Air Quality Models (Revised), (July, 1986), with Supplement A (July, 1987), Supplement B (July, 1993), and Supplement C (August, 1995), as published in the *Code of Federal Regulations*, July 1, 1995, and as amended by 60 FR 40465 (August 9, 1995).
- b. 40 CFR Part 58, Appendix B: Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring, as published in the Code of Federal Regulations, July 1, 1995, and as amended by 60 FR 52315 (October 6, 1995).
- 2. Copies of the *Code of Federal Regulations* and the *Federal Register* may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Attn.: New Orders, P.O. Box 371954, Pittsburgh PA 15250-7954; Phone (202) 512-1800; FAX (202) 512-2250.
- (2) The documents incorporated by reference in subsection (1) of this section are available for public inspection and copying (subject to copyright law) at the following main and regional offices of the Kentucky Division for Air Quality during the normal working hours of 8:00 a.m. to 4:30 p.m., local time.
- (a) Kentucky Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky 40601-1403, (502) 573-3382;
- (b) Ashland Regional Office, 3700 Thirteenth Street, Ashland, Kentucky 41105-1507, , (606) 920-2067;
- (c) Bowling Green Regional Office, 1508 Westen Avenue, Bowling Green, Kentucky 42104, (502) 746-7475;
- (d) Florence Regional Office, 7964 Kentucky Drive, Suite 8, Florence, Kentucky 41042, (606) 292-6411;
- (e) Hazard Regional Office, 233 Birch Street, Suite 2, Hazard, Kentucky 41701, (606) 435-6022;
- (f) London Regional Office, 85 State Police Road, London, Kentucky, 40741, (606) 878-0157;
- (g) Owensboro Regional Office, 3032 Alvey Park Drive W., Suite 700, Owensboro, Kentucky 42303, (502) 687-7304; and
- (h) Paducah Regional Office, 4500 Clarks River Road, Paducah, Kentucky 42003, (502) 898-8468.

Section 22. Significant Net Emissions Rates

POLLUTANT	EMISSIONS RATE (tons per year)	
Carbon monoxide	100 tons per year (tpy)	
Nitrogen oxides	40 tpy	
Sulfur dioxide	40 tpy	
Particulate matter	25 tpy of particulate matter emissions	
	15 tpy of PM_{10} emissions	
Ozone	40 tpy of volatile organic compounds	
Lead	0.6 tpy	
Asbestos	0.007 tpy	
Beryllium	0.0004 tpy	
Mercury	0.1 tpy	
Vinyl chloride	1 tpy	
Fluorides	3 tpy	
Sulfuric acid mist	7 tpy	
${ m Hydrogen}$ sulfide $({ m H_2S})$	10 tpy	
Total reduced su	ılfur (including H ₂ S)	
	10 tpy	
Reduced sulfur compounds	10 tpy	
(including H_2S)		
Municipal waste-combustor organics	3.2×10^{-6} megagrams per year (Mg/y)	
(measured as	total tetra-through	
	$(3.5 \times 10^{-6} \text{ tpy})$	
octa-chlorinated dibenzo-p-dioxi	ns	
and dibenzofurans)		
Municipal waste combustor metals	14 Mg/y (15 tpy)	
(measured as particulate matter)		
Municipal waste	combustor acid gases	
	36 Mg/y (40 tpy)	
(measured as sulfur dioxide and		
hydrogen chloride)		
Municipal solid w	aste landfill emissions	
	45 Mg/y (50 tpy)	
(measured as nonmethane organic	compounds)	

Section 23. Ambient Air Increments

POLLUTANT	Maximum Allowable Increase
	(Micrograms per cubic meter)
Class I	
Particulate Matter:	
${\rm PM}_{10}$, annual arithmetic me	an 4
PM_{10} , 24-hour maximum	8
Sulfur Dioxide:	
Annual arithmetic mean	2
24-hour maximum	5
3-hour maximum	25
Nitrogen Dioxide:	
Annual arithmetic mean	2.5
Class II	
Particulate Matter:	
${ m PM}_{10}$, annual arithmetic me	an 17
PM_{10} , 24-hour maximum	30
Sulfur Dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	512
Nitrogen Dioxide:	
Annual arithmetic mean	25

Section 24. Significant Air Quality Impact

POLLUTANT	AIR QUALITY LEVEL	AVERAGING TIME
Carbon monoxide	575 μg/m³	8-hour average
Nitrogen dioxide	$14 \mu g/m^3$	annual average
Particulate matter	$10~\mu g/m^3~of~PM_{10}$	24-hour average
Sulfur dioxide	$13 \mu g/m^3$	24-hour average
Ozone	No de minimis air quali	ty level is provided for ozone.
	However, a net increas	e of 100 tons per year or more
	of volatile organic	compounds subject to this
administrative regulation is requir		ion is required to perform an

ambient impact analysis including the gathering of ambient air quality data.

Lead	$0.1 \mu g/m^3$	3-month average
Mercury	$0.25 \mu g/m^3$	24-hour average
Beryllium	$0.001 \mu g/m^3$	24-hour average
Fluorides	$0.25 \mu g/m^3$	24-hour average
Vinyl chloride	$15 \mu g/m^3$	24-hour average
Hydrogen sulfide	$0.2 \mu \text{g/m}^3$	1-hour average
Total reduced sulfur	$10 \mu g/m^3$	1-hour average
Reduced sulfur compounds	$10 \mu g/m^3$	1-hour average

Section 25. Ambient Air Increments for Class I Variances

	Maximum Allowable Increase
POLLUTANT	(micrograms per cubic meter)
Particulate Matter:	
${ m PM}_{10}$, annual arithmetic mean	17
PM_{10} , 24-hour maximum	30
Sulfur Dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	325
Nitrogen Dioxide:	
Annual arithmetic mean	25

Section 26. Ambient Air Increments for Presidential or Gubernatorial SO_2 Variances Maximum Allowable Increase

(Micrograms per cubic meter)

	Terr	Terrain areas	
Period of Exposure	Low	High	
24-hour maximum	36	62	
3-hour maximum	130	221	

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